Appendix D

Floodplain Management Review

Leudinghaus Road Bridge Replacement Project

EXECUTIVE ORDER 11988 – FLOODPLAIN MANAGEMENT EIGHT-STEP DECISION MAKING PROCESS

Executive Order 11988 (Floodplain Management) requires federal agencies "to avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of the floodplain and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative." FEMA's implementing regulations are at 44 CFR Part 9, which includes an eight-step decision making process for actions that may affect, or be affected by, floodplains or wetlands, require compliance with the executive order. This eight-step process is necessary because abutments, riprap supporting those abutments, and fill to support new bridge approaches would be placed in the floodplain and FEMA mapped floodway of the Chehalis River.

The steps in the decision-making process are provided in this appendix. These steps involve public notice, identification and evaluation of alternatives to the proposed action, identification and minimization of adverse impacts, and implementation of the action

APPLICABILITY

The process includes a preliminary evaluation of whether a proposed action has the potential to affect floodplains or their occupants, support floodplain development, could potentially be subject to harm by location in floodplains, or could harm floodplains. The Proposed Action involves the construction of a single, clear span bridge, with the bridge deck elevated a minimum of 3 feet above the 100-year water surface elevation (268.5 ft NAVD88) of the Chehalis River. The bridge abutments and approach road fill would be within the 100-year floodplain and FEMA-mapped floodway. The approach roads would be below the 100-year flood elevation at their intersection with connecting roadways and would rise above the 100-year flood elevation as they near the bridge.

The project would require fill within the 100-year floodplain and FEMA-mapped floodway for the abutments and approach roads, including riprap to prevent scour around the bridge abutments and retaining walls for the approach roads, and could affect floodplain functions. The project would still be subject to harm by its location within the 100-year floodplain. The project would not increase the capacity of the local transportation network nor induce additional development within the Chehalis River floodplain. The project would maintain the support for occupancy and modification of the floodplain similar to the pre-flood event baseline.

STEP 1: DETERMINE WHETHER THE PROPOSED ACTION IS LOCATED IN THE 100-YEAR FLOODPLAIN (500-YEAR FLOODPLAIN FOR CRITICAL ACTIONS).

According to the FEMA *FIRM Panel No. 530102 0220B*, dated December 15, 1981 (FEMA 1981), the project is located within the 100-year (Zone A) and 500-year (Zone C) floodplain. The flood profile for the Chehalis River in FEMA's *Preliminary Draft Flood Insurance Study for Lewis County, Washington and Incorporated Areas, Flood Insurance Study Number 530102V001A*, dated November 11, 2010 (FEMA 2010), indicates that the estimated 100-year flood elevation of the Chehalis River is approximately 268 to 269 feet (NAVD88]) in the project area. Northwest Hydraulic Consultants (NHC)

conducted a hydrologic and hydraulics analysis of the proposed project and estimated the 100-year flood elevation at the proposed bridge site at 268.5 feet (NHC 2013). This elevation is above the banks of the Chehalis River. Figure 4.2-1 of the EA illustrates the relationship of the project to the mapped 100-year floodplain and floodway based on the 2010 flood insurance study (FIS) (FEMA 2010).

The bridge deck would have a minimum 3-foot clearance above the 100-year flood elevation (268.5 feet), and the surface of the approach roads would be above the 100-year flood elevation where the approach roads meet the bridge deck. However, because the connecting roads on the south side of the river (SR 6 and Hatchery Road) are below the 100-year flood elevation, the south approach roads would also be below the 100-year flood elevation at their intersection. On the north side of the river, the bridge approach and connecting reconstructed segment of Leudinghaus Road would be above the 100-year flood elevation. However, east and west of the project footprint, Leudinghaus Road is below the 100-year flood elevation. The 40% plan sheets provided in Appendix B of the EA illustrate the road plan and profile in relationship to the estimated 100-year flood elevation. The bridge abutments and approach roads on both sides of the river would be within the FEMA-mapped floodway (see Figure 4.2-1 of the EA).

STEP 2: NOTIFY THE PUBLIC AT THE EARLIEST POSSIBLE TIME OF THE INTENT TO CARRY OUT AN ACTION IN A FLOODPLAIN, AND INVOLVE THE AFFECTED AND INTERESTED PUBLIC IN THE DECISION-MAKING PROCESS.

A disaster cumulative notice was provided to the public after the disaster was declared and was published in papers of record in the declared counties. In addition, extensive public involvement activities for the project have been ongoing since that time. These have included public meetings conducted by Lewis County and FEMA, both independently and in coordination, and FEMA's NEPA public scoping activities.

Public meetings related to the project were held by Lewis County in February 2009, August 2010, September 2011, and January 2012. On August 13, 2012, FEMA sent a second NEPA scoping letter to agencies, Tribes, and local interested parties. The letter described the proposed project and requested comments on issues and concerns, the range of alternatives, and potential effects regarding the project. Comments were received from the Washington State Department of Ecology and local residents. These comments, in addition to public comments submitted to Lewis County at the various public meetings held related to the project since December 2007, were considered and addressed in the preparation of the EA.

See Section 5 of the EA for more information regarding public involvement.

STEP 3: IDENTIFY AND EVALUATE PRACTICABLE ALTERNATIVES TO LOCATING THE PROPOSED ACTION IN A FLOODPLAIN (INCLUDING ALTERNATIVE SITES, ACTIONS, AND THE "NO ACTION" OPTION). IF A PRACTICABLE ALTERNATIVE EXISTS OUTSIDE THE FLOODPLAIN, FEMA MUST LOCATE THE ACTION AT THE ALTERNATIVE SITE.

FEMA is required to utilize alternative sites outside the floodplain or alternative actions that avoid the floodplain, unless no practicable alternative exists. A thorough alternatives analysis process considered other roadway options and a number of design alternatives to comply with this requirement (see Section 3.1, *Alternatives Considered but not Carried Forward*). The Preferred Action Alternative (i.e., the Proposed Action) was determined to be the best engineering solution with the least effect on the floodplain of the numerous alternatives analyzed. Several alternatives were reviewed but eliminated from

further consideration in the EA because they did not meet the project purpose and need, they were not practical, or they were not suitable for FEMA funding under its PA program.

The No Action Alternative is a practicable alternative to locating the project within the floodplain, but the No Action Alternative would not met the purpose and need for the project.

Given the purpose and need for the project, which is to restore access between the south and north sides of the Chehalis River in the project area, and the elevation and horizontal extent of the 100-year (base) and 500-year floodplains of the Chehalis River in the project area, there is no practicable action alternative site location outside of the Chehalis River floodplain. Alternative actions, such as shifting the function of this bridge to the Chandler Bridge, were also considered. Due to the width of the floodplain throughout the valley and the distance needed to travel by local residents to evacuate the floodplain, combined with the social and cultural fabric of the community on both sides of river that was created by the location of the former bridge, no practicable alternative action was found.

STEP 4: IDENTIFY THE POTENTIAL DIRECT AND INDIRECT IMPACTS ASSOCIATED WITH THE OCCUPANCY OR MODIFICATION OF FLOODPLAINS AND THE POTENTIAL DIRECT AND INDIRECT SUPPORT OF FLOODPLAIN DEVELOPMENT THAT COULD RESULT FROM THE PROPOSED ACTION.

The proposed bridge structure under Alternative 1 would be a single, clear span bridge over the Chehalis River. The proposed single, clear span bridge structure is being designed to accommodate the 100-year flood (the design event) on the Chehalis River. NHC conducted a hydrologic and hydraulic evaluation of the project reach to estimate the maximum water surface elevation expected at the proposed bridge site (the design elevation) during the 100-year flood (NHC 2013). The 2013 NHC study estimated the 100-year flood elevation at the proposed bridge location at 268.5 feet. To accommodate flood flows and pass large woody debris, the bridge deck is being designed with a minimum 3-foot clearance above the 100-year water surface elevation (compared with -5.4 feet for the original bridge structure [NHC 2008]). Based on the design elevation of 268.5 feet, the minimum low chord of the proposed bridge would be 271.5 feet. The 2013 NHC study indicated that the proposed design would result in a slight lowering of the 100-year flood water surface levels along the project reach compared to pre-2007 conditions (NHC 2013).

While the proposed bridge structure with its higher design elevation would not vertically confine or obstruct the 100-year flood flows, the bridge abutments and fill for the approach roads are located within the FEMA-mapped floodway of the Chehalis River and would horizontally constrict 100-year flood flows. The 2013 NHC study indicated that flows during large flood events would contract around the south approach road fill and be forced into the main channel, and that this could cause up to 3 feet of scour in the main channel and 11 feet of scour around the south abutment (NHC 2013).

The NHC study also indicated that complex flow patterns around both the south and north abutments could lead to increased scour at the base of the abutments as well as lateral erosion of the approach fills. The proposed project includes riprap inlaid into the existing bank slope around the bridge abutments and at the base of the approach fills to protect the abutments and fills, which would reduce the risk of infrastructure damage during flood events. Riprap around the abutments would not extend below the OHWM, and would therefore have no effect on channel velocities or cause scour during low and normal flows, but could cause site-specific increases in near-bank velocities during higher flow events compared

to the existing rough, vegetation riverbanks. The effects of riprap on near-bank velocities during high flows that do not overtop the main river channel would likely be very slight and would have a negligible impact. However, the location of the bridge abutments and approach roads within the floodway, and expected contraction of flows around the south approach road fill in combination with riprap, is expected to result in an increase in 100-year channel velocities at the bridge during higher flow events, including 100-year flood events or greater. The project's effects on channel velocities during the 100-year and other large flow events are expected to be measurable, but localized, and would occur periodically over the long term. This would be a minor, long-term adverse impact on hydrologic conditions in the Chehalis River during high flow/flood events relative to existing condition at the project site.

As described above, the 2013 NHC study indicated that the proposed design would result in a slight lowering of the 100-year flood water surface levels along the project reach compared to pre-disaster (2007) conditions (NHC 2013). Alternative 1 would provide direct access from SR 6 to communities on the north side of the Chehalis River. It would not increase the overall capacity of the local transportation network in a manner that would induce additional development within the project area floodplain beyond the expected normal growth for the Meskill area. However, it would provide incentive to maintain occupancy in the floodplain with its associated risk. This is a minor, long-term adverse impact on floodplains. It would restore support for floodplain development to its pre-disaster condition.

Impact of Flood Water on the Proposed Facilities

The single-clear span bridge structure with the bridge deck elevated a minimum of 3 feet above the 100-year water surface would be at considerably less risk of harm during future flood events than the original Leudinghaus Road Bridge, which was destroyed in the December 2007 flooding of the Chehalis River. The Proposed Action would have a substantial benefit on transportation and access in the project area by restoring access between the south and north sides of the Chehalis River to its pre-disaster condition. This benefit outweighs the minor unavoidable adverse effects of the project on the floodplain.

Impact of the Proposed Action on Natural Values

Natural values are defined in 44 CFR 9.4 and described in 44 CFR 9.10(b)(2) as including water resource values (see above), living resource values (fish and wildlife and biological production), cultural resource values (including archaeological and historic sites, open space, natural beauty, and recreation), and agricultural and forestry resource values.

In addition to impacts on the Chehalis River and its floodplain/floodway described above, the Proposed Action would have a minor, short-term (construction-related) adverse impact on a small ephemeral drainage during culvert removal/installation and channel widening. Alterations to the stream channel are expected to improve existing downcutting and bank erosion in its lower reach and reduce sediment delivery to the Chehalis River during high flows. New impervious surfaces would increase stormwater runoff and alter existing drainage patterns in the project area. Stormwater runoff from the project would be treated in proposed stormwater ponds and released to the ephemeral drainage described above and the Chehalis River according to natural drainage rates. Ground disturbance and pile driving on the shoreline could have minor, short-term adverse impacts on water quality from temporary erosion, mobilization of sediments, and increased turbidity during construction. Overall, the Proposed Action would have

negligible to minor adverse impacts on hydrology, groundwater recharge, and water quality in surface waters.

The Proposed Action would have negligible to minor adverse impacts on vegetation and terrestrial wildlife (wild turkey, cavity-nesting ducks, and elk), due to disturbance during construction and the permanent clearing of riparian forest, grasslands, and disturbed uplands. The project area provides habitat for additional wildlife tolerant of human presence, such as waterfowl, songbirds, and raptors; raccoon, opossum, and black-tailed deer; and some reptile species. The Proposed Action would have negligible to minor adverse effects on migratory birds.

The Proposed Action would have a minor adverse effect on priority fish species and essential fish habitat (EFH) for Chinook and coho salmon due to the permanent removal of riparian vegetation adjacent to the Chehalis River and Hope Creek and from artificial overwater shading from the proposed bridge. The Proposed Action would have no effect on threatened and endangered species as none are present.

Archaeological testing for resources has been conducted, and no resources were found, except for a 1940s road that has been determined not to have historical significance. However, based on the archaeological sensitivity of the project area and the presence of extensive modern alluvial deposits, the potential exists for encountering buried archaeological resources within the project area. The clearing of riparian forest and the elevated bridge, large fill for the approach roads, and stormwater ponds would alter site-level views of the Chehalis River and adjacent areas, but would have no impact on the overall landscape level views.

The Proposed Action would have a negligible long-term adverse impact on farmland associated with the permanent conversion of approximately 7.3 acres of Prime Farmland to non-agricultural uses. The farmland to be converted is not currently in production and no farm facilities are present on the site. Based on input from the NRCS, the Proposed Action would have a negligible long-term adverse effect on farmland in Lewis County.

STEP 5: MINIMIZE THE POTENTIAL ADVERSE IMPACTS AND SUPPORT TO OR WITHIN FLOODPLAINS TO BE IDENTIFIED UNDER STEP 4, RESTORE AND PRESERVE THE NATURAL AND BENEFICIAL VALUES SERVED BY FLOODPLAINS.

As described in Section 2.0 (*Purpose and Need*) and Section 3.0 (*Alternatives*) of the EA, the Proposed Action is designed to minimize floodplain impacts to the extent possible, and provide safer and more reliable access across the Chehalis River. The bridge deck would have a minimum 3-feet of clearance above the 100-year flood elevation of the Chehalis River, and the bridge abutments and approaches would be located above the 100-year flood elevation. Riprap would be placed around the abutments and base of the approach road retaining walls to prevent scour.

As described in Section 3.3.2 (*Impact Avoidance and Minimization Measures*) of the EA, the Proposed Action includes a list of environmental conditions that address erosion and sediment control, spill prevention, stormwater pollution prevention, temporary access, footprint minimization, migratory bird protection, and inadvertent discovery of archeological resources during construction.

STEP 6: REEVALUATE THE PROPOSED ACTION TO DETERMINE FIRST, IF IT IS STILL PRACTICABLE IN LIGHT OF ITS EXPOSURE TO FLOOD HAZARDS, THE EXTENT TO WHICH IT WILL AGGRAVATE THE HAZARDS TO OTHERS, ITS POTENTIAL TO DISRUPT FLOODPLAIN VALUES AND SECOND, IF ALTERNATIVES PRELIMINARILY REJECTED AT STEP 3 ARE PRACTICABLE IN LIGHT OF THE INFORMATION GAINED IN STEPS 4 AND 5. FEMA SHALL NOT ACT IN A FLOODPLAIN UNLESS IT IS THE ONLY PRACTICABLE LOCATION.

Given the location of the Proposed Action relative to the Chehalis River and its floodplain and the purpose and need for the project, which is to restore access between the south and north sides of the river in the project area, no practicable action alternatives have been identified to locating the project (a bridge crossing) within the Chehalis River floodplain. The No Action Alternative is a practicable alternative to locating the project in floodplains, but the No Action Alternative would not meet the purpose and need for the project.

The Proposed Action, under which FEMA would provide funding to Lewis County for implementation of the Preferred Alternative, would have minor adverse effects on floodplains, primarily from fill within the floodplain associated with the new bridge structure and approach roads. The proposed project would not increase the capacity of the local transportation network and is not anticipated to induce additional development within the floodplain in the project area. It would restore support for floodplain development to its pre-disaster condition. The Proposed Action would have a significant beneficial effect on transportation and access in the area affected by the proposed project by restoring access between south and north sides of the Chehalis River to its pre-disaster condition. This benefit outweighs the minor unavoidable adverse effects on the floodplain of the project. The Proposed Action would be re-evaluated following comments on the Public Draft EA and prior to the Final EA.

STEP 7: PREPARE AND PROVIDE THE PUBLIC WITH A FINDING AND PUBLIC EXPLANATION OF ANY FINAL DECISION THAT THE FLOODPLAIN IS THE ONLY PRACTICABLE ALTERNATIVE.

The Final EA and decision document (FONSI or NOI) will provide the public with the agency's final decision regarding the project.

STEP 8: REVIEW THE IMPLEMENTATION AND POST-IMPLEMENTATION PHASES OF THE PROPOSED ACTION TO ENSURE THAT THE REQUIREMENTS STATED IN SECTION 44CFR 9.11 ARE FULLY IMPLEMENTED. OVERSIGHT RESPONSIBILITY SHALL BE INTEGRATED INTO EXISTING PROCESSES.

The Proposed Action will be constructed in accordance with applicable floodplain regulations. Oversight responsibility will be built into the implementation and post-implementation phases.

REFERENCES

FEMA (Federal Emergency Management Agency). 1981. Flood Insurance Rate Map (FIRM), Lewis County, Washington (unincorporated areas). Community Pane Number 530102 0220B. Effective Date December 15, 1981.

FEMA. 2010. Flood Insurance Study, Lewis County, Washington and Incorporated Areas. Flood Insurance Study Number 530102V001A. Preliminary, November 11, 2010.

NHC (Northwest Hydraulic Consultants). 2008. Hydraulic Evaluation Report, Leudinghaus Road Bridge Replacement Project, Chehalis River near Doty. Prepared for Harper Houf Peterson Righellis, Inc. and Lewis County Department of Public Works. November 2008 Draft. Seattle, WA.

NHC. 2013. Hydrologic and Hydraulic Evaluation, Leudinghaus Road Bridge Replacement, Chehalis River near Meskill. Prepared for BergerABAM Inc. and Lewis County Public Works Department. Seattle, WA. July 17, 2013.

Appendix E

Species Lists for Lewis County

LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES AND CRITICAL HABITAT; CANDIDATE SPECIES; AND SPECIES OF CONCERN IN LEWIS COUNTY AS PREPARED BY THE U.S. FISH AND WILDLIFE SERVICE WASHINGTON FISH AND WILDLIFE OFFICE

(Revised March 15, 2012)

LISTED

Canada lynx (*Lynx canadensis*)
Gray wolf (*Canis lupus*)
Grizzly bear (*Ursus arctos* = *U. a. horribilis*)
Marbled murrelet (*Brachyramphus marmoratus*)
Northern spotted owl (*Strix occidentalis caurina*)

Major concerns that should be addressed in your Biological Assessment of project impacts to listed species include:

1. Level of use of the project area by listed species.

2. Effect of the project on listed species' primary food stocks, prey species, and foraging areas in all areas influenced by the project.

3. Impacts from project activities and implementation (e.g., increased noise levels, increased human activity and/or access, loss or degradation of habitat) that may result in disturbance to listed species and/or their avoidance of the project area.

Lupinus sulphureus ssp. *kincaidii* (Kincaid's lupine)
Sidalcea nelsoniana (Nelson's checker-mallow)

Major concerns that should be addressed in your Biological Assessment of project impacts to listed plant species include:

1. Distribution of taxon in project vicinity.

2. Disturbance (trampling, uprooting, collecting, etc.) of individual plants and loss of habitat.

3. Changes in hydrology where taxon is found.

DESIGNATED

Critical habitat for the marbled murrelet
Critical habitat for the northern spotted owl
Critical habitat for *Lupinus sulphureus* ssp. *kincaidii* (Kincaid's lupine)

PROPOSED

None

CANDIDATE

Fisher *(Martes pennanti)* – West Coast DPS
North American wolverine *(Gulo gulo luteus)* – contiguous U.S. DPS
Whitebark pine *(Pinus albicaulis*)

SPECIES OF CONCERN

Bald eagle (*Haliaeetus leucocephalus*)
Cascades frog (*Rana cascadae*)
Coastal cutthroat trout (*Oncorhynchus clarki clarki*) [southwest Washington DPS]
Columbia torrent salamander (*Rhyacotriton kezeri*)
Larch Mountain salamander (*Plethodon larselli*)
Long-eared myotis (*Myotis evotis*)
Long-legged myotis (*Myotis volans*)
Northern goshawk (*Accipiter gentilis*)
Northwestern pond turtle (*Emys* (= *Clemmys*) *marmorata marmorata*)
Olive-sided flycatcher (*Contopus cooperi*)
Oregon vesper sparrow (*Pooecetes graminus affinis*)
Pacific lamprey (*Lampetra tridentata*)
Pacific Townsend's big-eared bat (*Corynorhinus townsendii townsendii*)
Peregrine falcon (*Falco peregrinus*)
River lamprey (*Lampetra ayresi*)
Tailed frog (*Ascaphus truei*)
Valley silverspot (*Speyeria zerene bremeri*)
Van Dyke's salamander (*Plethodon vandykei*)
Western gray squirrel (*Sciurus griseus griseus*)
Western toad (*Bufo boreas*)
Cimicifuga elata (tall bugbane)
Delphinium leucophaeum (pale larkspur)
Meconella oregana (white meconella)

Endangered Species Act Status of West Coast Salmon & Steelhead

(Updated Aug. 11, 2011)

Species[1]			Current Endangered Species Act Listing Status	ESA Listing Actions Under Review
Sockeye Salmon (*Oncorhynchus nerka*)	1	Snake River	***Endangered***	
	2	Ozette Lake	***Threatened***	
	3	Baker River	*Not Warranted*	
	4	Okanogan River	*Not Warranted*	
	5	Lake Wenatchee	*Not Warranted*	
	6	Quinalt Lake	*Not Warranted*	
	7	Lake Pleasant	*Not Warranted*	
Chinook Salmon (*O. tshawytscha*)	8	Sacramento River Winter-run	***Endangered***	
	9	Upper Columbia River Spring-run	***Endangered***	
	10	Snake River Spring/Summer-run	***Threatened***	
	11	Snake River Fall-run	***Threatened***	
	12	Puget Sound	***Threatened***	
	13	Lower Columbia River	***Threatened***	
	14	Upper Willamette River	***Threatened***	
	15	Central Valley Spring-run	***Threatened***	
	16	California Coastal	***Threatened***	
	17	Central Valley Fall and Late Fall-run	***Species of Concern***	
	18	Upper Klamath-Trinity Rivers	*Not Warranted*	
	19	Oregon Coast	*Not Warranted*	
	20	Washington Coast	*Not Warranted*	
	21	Middle Columbia River spring-run	*Not Warranted*	
	22	Upper Columbia River summer/fall-run	*Not Warranted*	
	23	Southern Oregon and Northern California Coast	*Not Warranted*	
	24	Deschutes River summer/fall-run	*Not Warranted*	
Coho Salmon (*O. kisutch*)	25	Central California Coast	***Endangered***	
	26	Southern Oregon/Northern California	***Threatened***	
	27	Lower Columbia River	***Threatened***	• Critical habitat
	28	Oregon Coast	***Threatened***	
	29	Southwest Washington	*Undetermined*	
	30	Puget Sound/Strait of Georgia	***Species of Concern***	
	31	Olympic Peninsula	*Not Warranted*	
Chum Salmon (*O. keta*)	32	Hood Canal Summer-run	***Threatened***	
	33	Columbia River	***Threatened***	
	34	Puget Sound/Strait of Georgia	*Not Warranted*	
	35	Pacific Coast	*Not Warranted*	
Steelhead (*O. mykiss)*	36	Southern California	***Endangered***	
	37	Upper Columbia River	***Threatened***	
	38	Central California Coast	***Threatened***	
	39	South Central California Coast	***Threatened***	
	40	Snake River Basin	***Threatened***	
	41	Lower Columbia River	***Threatened***	
	42	California Central Valley	***Threatened***	
	43	Upper Willamette River	***Threatened***	
	44	Middle Columbia River	***Threatened***	
	45	Northern California	***Threatened***	
	46	Oregon Coast	***Species of Concern***	
	47	Southwest Washington	*Not Warranted*	
	48	Olympic Peninsula	*Not Warranted*	
	49	Puget Sound	***Threatened***	• Critical habitat
	50	Klamath Mountains Province	*Not Warranted*	
Pink Salmon *(O. gorbuscha)*	51	Even-year	*Not Warranted*	
	52	Odd-year	*Not Warranted*	

1 The ESA defines a "species" to include any distinct population segment of any species of vertebrate fish or wildlife. For Pacific salmon, NOAA Fisheries Service considers an evolutionarily significant unit, or "ESU," a "species" under the ESA. For Pacific steelhead, NOAA Fisheries Service has delineated distinct population segments (DPSs) for consideration as "species" under the ESA.

Appendix F

Consultation, Coordination, and Public Involvement

U.S. Department of Homeland Security
Region X
130 228th Street, SW
Bothell, WA 98021-9796

FEMA

October 11, 2012

Allyson Brooks, Ph.D.
State Historic Preservation Officer
Washington State Department of Archaeology and Historic Preservation
P.O. Box 48343
Olympia, Washington 98504-8343

RE: Section 106 Consultation for the Leudinghaus Road Bridge Replacement Project

Dear Dr. Brooks:

Lewis County has applied through the Washington State Emergency Management Division (EMD) to the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) for funding assistance to replace the Leudinghaus Road Bridge (also known as the Mays Bridge) across the Chehalis River near the community of Meskill in Lewis County, Washington. The original bridge was washed away during a severe winter storm and flooding on December 3, 2007. The President declared the storm event a major disaster (FEMA-1734-DR-WA), making funds available for public infrastructure projects. The project will replace the former bridge that was destroyed by flooding of the Chehalis River during the December 2007 storm event. FEMA is preparing an Environmental Assessment (EA) and the project is being reviewed as the proposed action.

The purpose of this letter is to re-initiate consultation with you pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations at 36 CFR 800.4(a) regarding the Leudinghaus Road Bridge Project.

FEMA first initiated consultation with Washington State Department of Archaeology and Historic Preservation (DAHP) on the Leudinghaus Road Bridge Replacement Project in 2009 (initiated as part of the Leudinghaus and Chandler Road Bridge Replacement Projects). At that time, the project included one project alternative for the Leudinghaus Road Bridge Replacement Project. An initial, intensive site survey of the approved project Area of Potential Effects (APE), consisting of shovel test pits (STPs), was conducted from August 25 through August 30, 2009. A report titled *"Cultural Resources Inventory and Evaluation Report, Leudinghaus and Chandler Road Bridge Replacement Projects, Lewis County, Washington,"* documenting the results of the August 2009 site survey, was prepared in October 2009. Because early Native American artifacts were discovered within four STPs within the project APE, a follow-up site investigation consisting of more-extensive subsurface testing was conducted between October 12 and October 21, 2009, to determine if the initial discovery of prehistoric materials was indicative of a larger intact archaeological deposit eligible for listing on the National Register of Historic Places (NRHP). A report titled *"National Register of Historic Places Evaluation Report, Leudinghaus*

Bridge Replacement Project, Lewis County, Washington," documenting the results of the October 2009 follow-up investigation, was prepared in November 2010. The follow-up report included a recommendation that the prehistoric archaeological site, referred to as site 45LE795, be determined eligible for NRHP listing under Criterion D. These two reports were provided to you informally by FEMA Historic Preservation Specialist, Charles Diters, in 2010.
In late 2010, about the same time the November 2010 NRHP evaluation report was submitted, the project was put on hold while FEMA evaluated the need for the project and eligibility for FEMA funding. These issues were resolved in January 2012, and the project has since been re-initiated. However, the project alternatives have now been revised. The current project includes two project alternatives, and the original alternative is no longer being considered. The overall project description (including the current project alternatives) and the proposed new APE are described below.

Project Description

During the December 2007 storm, the Chehalis River overflowed its banks, carrying large woody debris downstream. This debris hit and destroyed the vehicular bridge that connected River Road, on the south side of the river, to Leudinghaus Road, on the north side of the river. The bridge provided access from State Route 6 (SR 6) via River Road across the Chehalis River to homes, businesses, and natural and recreational resources on the north side of the river. The project would restore vehicular access between these areas by constructing a new bridge over the Chehalis River. The proposed bridge design is a single-span structure with an elevated bridge deck to better accommodate debris associated with high-flow events in the river (the new bridge deck would be raised by approximately 14 feet relative to the old bridge). The higher elevation of the proposed bridge structure would require alterations to the approach roads on both sides of the river to match the elevation of the new bridge, including grade changes, realignment, and new roadway.

FEMA has identified two project action alternatives for evaluation in the Environmental Assessment (EA). The two action alternatives involve construction of a new bridge at different locations along the Chehalis River (see attached *Vicinity Map*). Alternative 1, which Lewis County has identified as their Preferred Alternative, involves construction of a new bridge approximately 2,500 feet upstream (west) of the former bridge location. Under Alternative 1, the new bridge would extend from the intersection of Hatchery Road and SR 6 on the south side of the river to Leudinghaus Road on the north side of the river. Alternative 2 involves construction of a new bridge at the original bridge location with a new SR 6 intersection. Under Alternative 2, River Road, from SR 6 to its western intersection, would be decommissioned.

The project is located in western Lewis County, approximately 15 miles west of Chehalis via SR 6. Alternative 1 is located in Section 9 of Township 13 North, Range 4 West. Alternative 2 is located in Sections 3, 4, 9, and 10 of Township 13 North, Range 4 West.

Area of Potential Effects (APE)

FEMA has identified a proposed revised APE based on the current scope of the project. We are proposing that the revised APE encompass the original APE due to the location and configuration of Alternative 2 in relation to the original project alternative. The proposed APE is equal to the maximum extent of ground disturbance and possible indirect effects for both project action alternatives, including areas of temporary disturbance (e.g., construction staging areas), to a depth equal to specific construction disturbances (see attached *Area of Potential Effects Maps 1 & 2)*. The APE considers potential effects on archaeological properties and historical buildings and structures in the project vicinity.

AECOM of Seattle, Washington, is assisting FEMA with its Section 106 responsibilities. As part of this assistance, AECOM will conduct a site visit to the project area to assess the need for fieldwork (survey, shovel testing) to identify historic properties, including archaeological properties, traditional cultural properties, or other resources of concern. FEMA is consulting with the Confederated Tribes of the Chehalis Reservation, Confederated Tribes and Bands of the Yakama Nation, Cowlitz Indian Tribe, Nisqually Indian Tribe, and the Quinault Indian Nation to identify properties of cultural or religious significance that may be affected by the project. FEMA will notify the Tribes of the site visit and fieldwork, and will invite them to participate and/or provide comment.

We request your comment and/or concurrence on the proposed revised APE for the project, and any other concerns you may have about the project. If you have any questions or comments, please contact Susan King, FEMA Region 10 Environmental Specialist, at the above address, or by phone (425-487-4582) or email (susan.king2@fema.dhs.gov) or myself by phone (425-487-4713) or email (science.kilner@fema.dhs.gov).

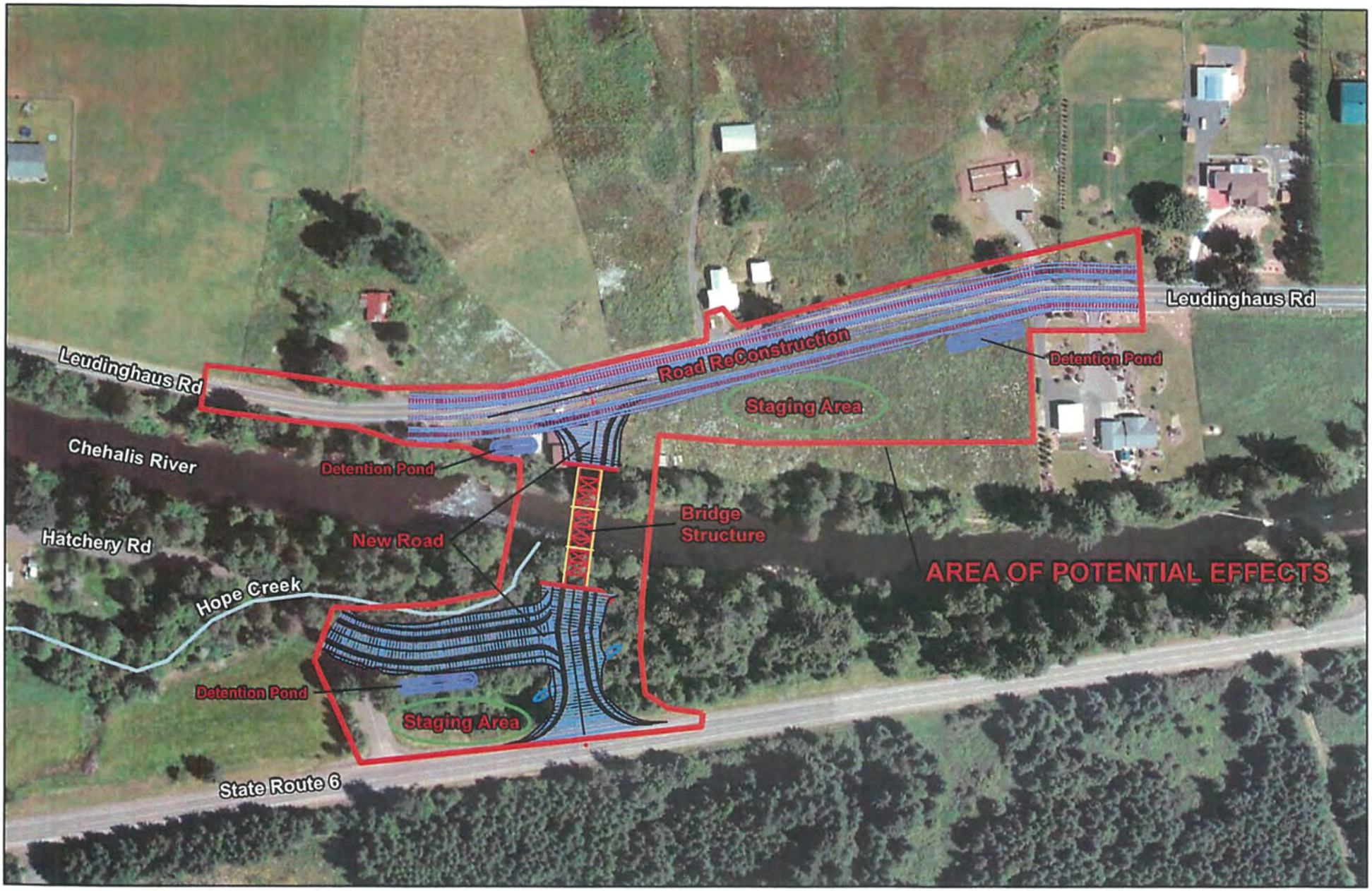
Sincerely,

Barry Hall for

Science Kilner
Acting Regional Environmental Officer

Enclosures:
Vicinity Map
Area of Potential Effects Map

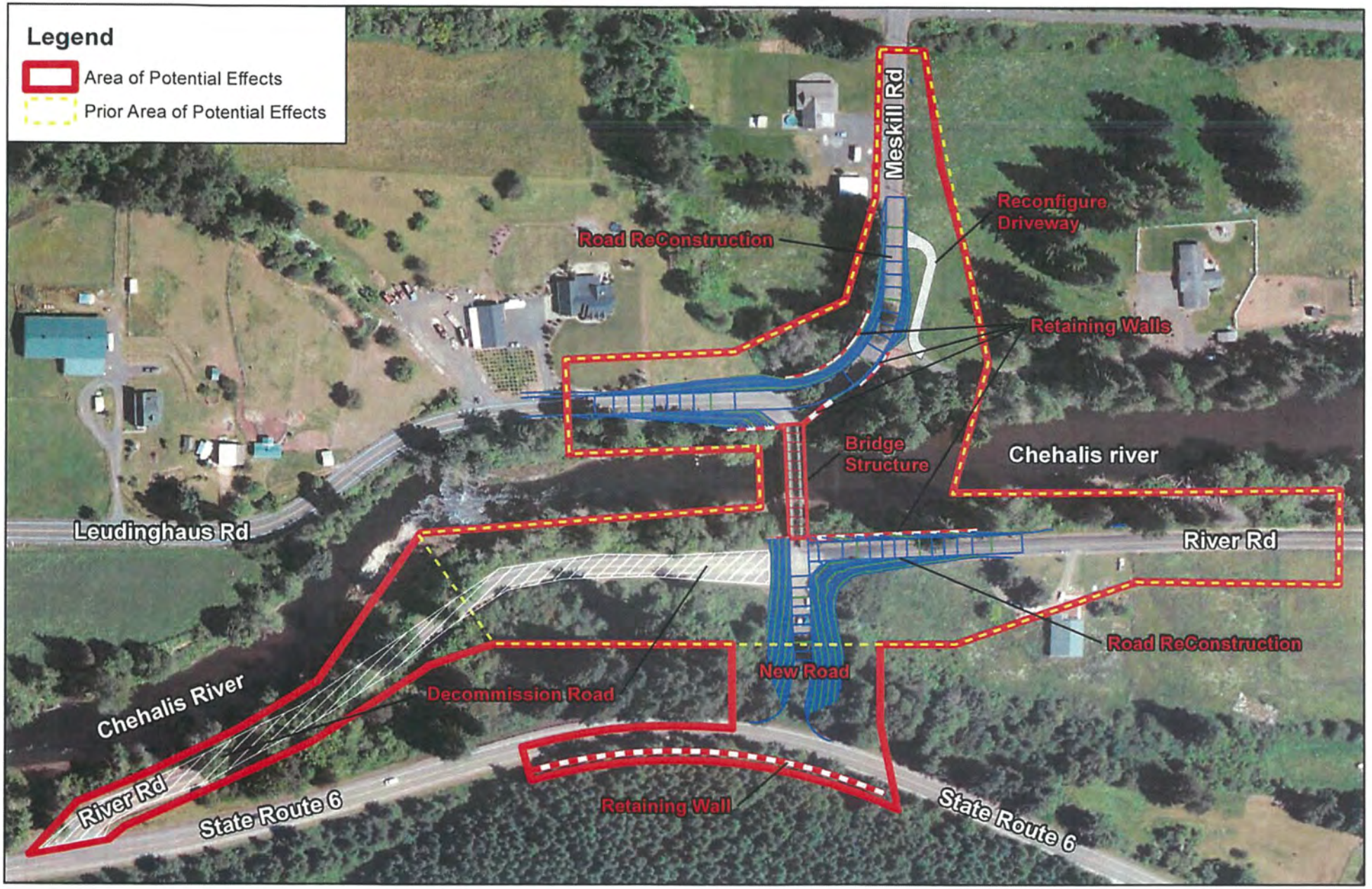
SK:bb



AREA OF POTENTIAL EFFECTS MAP (1 of 2)
Leudinghaus Bridge Replacement Project - Alternative 1 (Preferred Alternative)
Lewis County Public Works

N
W E
S

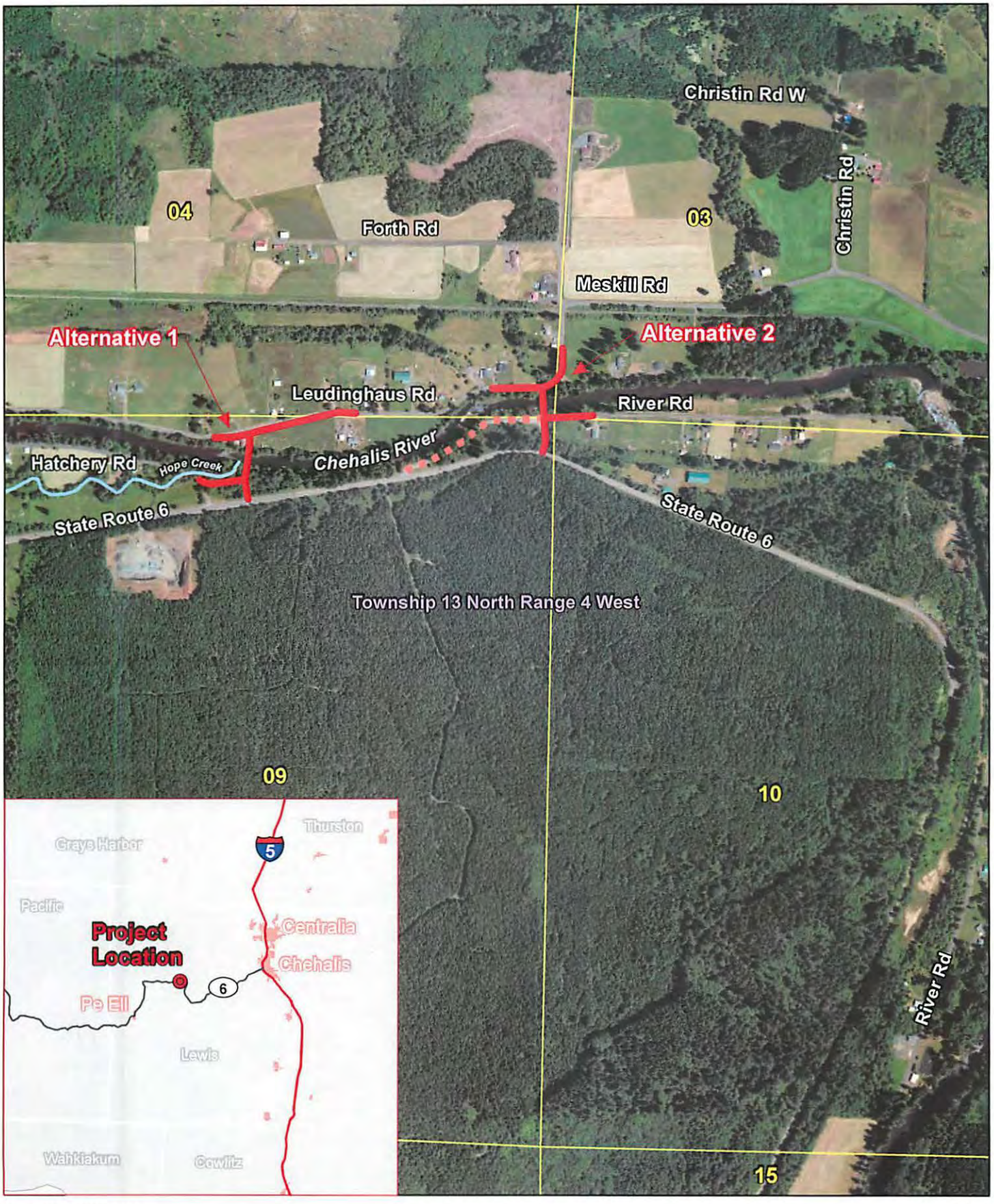
Feet
0 50 100 200



AREA OF POTENTIAL EFFECTS MAP (2 of 2)
Leudinghaus Bridge Replacement Project - Alternative 2
Lewis County Public Works

N W E S

Feet
0 50 100 200



VICINITY MAP
Leudinghaus Bridge Replacement
Lewis County Public Works

Alternative Alignment

Decommission Existing Road

N
W E
S

Feet
0 600 1,200

Allyson Brooks, Director
State Historic Preservation Officer

DEPARTMENT OF ARCHAEOLOGY & HISTORIC PRESERVATION

Protect the Past, Shape the Future

October 29, 2012

Ms. Science Kilner
Deputy Environmental Officer
FEMA
130 228th Street SW
Bothell, WA 98021

In future correspondence please refer to:
Log: 011110-01-FEMA
Property: Dryad (Leudinghaus) Bridge Replacement
Re: Archaeology – Revised APE Concur

Dear Ms. Kilner:

We have reviewed the materials forwarded to our office for the above referenced project. Thank you for your description of the revised area of potential effect (APE) for the project. We concur with the new definition of the APE. We look forward to the results of your cultural resources survey efforts, your consultation with the concerned tribes, and receiving the survey report. We would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4) and the survey report when it is available.

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer in conformance with Section 106 of the National Historic Preservation Act and its implementing regulations 36CFR800. Should additional information become available, our assessment may be revised.

Thank you for the opportunity to review and comment. If you have any questions, please feel free to contact me.

Sincerely,

Lance Wollwage, Ph.D.
Transportation Archaeologist
(360) 586-3536
lance.wollwage@dahp.wa.gov

U.S. Department of Homeland Security
Region X
130 228th Street, SW
Bothell, WA 98021-9796

FEMA

August 19, 2013

Dr. Allyson Brooks
Washington State Historic Preservation Officer
Department of Archaeology and Historic Preservation
P. O. Box 48343
Olympia, Washington 98504-8343

Re: FEMA 1734 DR WA Public Assistance Grant Program
Dryad (Leudinghaus) Bridge Replacement, Lewis County
SHPO Log: 011110-01-FEMA

Dear Dr. Brooks:

Please consider this follow-up to your letter of March 4, 2013, regarding the Area of Potential Effects (APE) for the above Undertaking. The enclosed cultural resources report, prepared by AECOM under contract to the Federal Emergency Management Agency (FEMA), describes results from identification and evaluation efforts. The cultural resources survey identified no historic properties that would be impacted by the proposed Undertaking. An isolate archaeological resource was identified, the remains of the original River Road, but this was determined not eligible for *National Register of Historic Places*. The Undertaking includes demolition of a residential property, built in 1993, which is not discussed in the enclosed report. That property also is not eligible for the *National Register*. Initial outreach has occurred with Tribes to help determine if there are any historic properties of religious or cultural significance to them within the APE and no responses have been received to date. The enclosed report is also being provided to Tribes for comment.

Because of the potential for deeply buried cultural resources within the APE, Lewis County will be required to develop an archaeological monitor plan for implementation during excavation work. We will provide your office with a draft of that plan once available for review and approval. Based on identification and evaluation efforts to date, FEMA has determined that the proposed Undertaking will result in No Historic Properties Affected.

To assist your review please find enclosed a hard copy and CD of the cultural resources report. We respectfully request your concurrence with these findings or additional comment. Should you have any questions please contact Mr. Bill Kerschke at (425) 487-2187 or william.kerschke@fema.dhs.gov. Thank you.

Sincerely,

for Joanie Vinson

Mark Eberlein
Regional Environmental Officer

Enclosure

cc: Gary Urbas, EMD

DEPARTMENT OF
ARCHAEOLOGY &
HISTORIC PRESERVATION
Protect the Past, Shape the Future

Allyson Brooks Ph.D., Director
State Historic Preservation Officer

September 19, 2013

Mr. Mark Eberlein
Federal Emergency Management Administration
130 228TH ST SW
Bothell, WA 98021

In future correspondence please refer to:
Log: 011110-01-FEMA
Property: Dryad (Leudinghaus) Bridge Replacement
Re: More Information Needed

Dear Mr. Eberlein:

Thank you for contacting our office and providing the cultural resources report for the archaeological investigation associated with the Alternative 1 area of potential effect. I have reviewed the materials you provided for this project. In order to complete our review we request the following material to be provided to our office:

- DAHP does not accept reports with temporary field numbers assigned to archaeological resources. Please contact Morgan McLemore at DAHP to request a trinomial for the resource, update the cultural resources report, and resubmit to our agency at your convenience.

I would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4) and the survey report when it is available.

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations 36CFR800. Please contact me should you have any specific questions about our request and we look forward to receiving this material.

Please note that DAHP requires that all historic property inventory and archaeological site forms be provided to our office electronically. If you have not registered for a copy of the database, please log onto our website at www.dahp.wa.gov and go to the Survey/Inventory page for more information and a registration form. To assist you in conducting a survey, DAHP has developed a set of cultural resource reporting guidelines. You can obtain a copy from our website.

Finally, please note that effective Nov. 2, 2009, DAHP requires that all cultural resource reports be submitted in PDF format on a labeled CD along or electronically. For further information please go to http://www.dahp.wa.gov/documents/CR_ReportPDF_Requirement.pdf.

Thank you for the opportunity to review and comment. If you have any questions, please feel free to contact me.

Sincerely,

Matthew Sterner, M.A.
Transportation Archaeologist
(360) 586-3082
matthew.sterner@dahp.wa.gov

DEPARTMENT OF
ARCHAEOLOGY &
HISTORIC PRESERVATION
Protect the Past, Shape the Future

Allyson Brooks Ph.D., Director
State Historic Preservation Officer

October 16, 2013

Mr. Mark Eberlein
Federal Emergency Management Administration
130 228TH ST SW
Bothell, WA 98021

In future correspondence please refer to:
Log: 011110-01-FEMA
Property: Dryad (Leudinghaus) Bridge Replacement
Re: Not Eligible, No Historic Properties

Dear Mr. Eberlein:

Thank you for contacting our office and providing a copy of the revised cultural resources survey report completed by AECOM. I concur with their professional recommendations that the remnant road feature, identified as 45LE873, is not eligible for listing in the National Register of Historic Places. As a result, I concur with your finding of no historic properties affected for the project. Since archaeological monitoring is recommended in the report, I would advise you to have a robust Inadvertent Discovery plan (IDP) in place and follow the suggestion to have deeper excavations monitored during construction.

We would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4).

These comments are based on the information available at the time of this review and on the behalf of the State Historic Preservation Officer in conformance with Section 106 of the National Historic Preservation Act and its implementing regulations 36CFR800.

Should additional information become available, our assessment may be revised. In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity must stop, the area secured, and this office and the concerned tribes notified.

Thank you for the opportunity to review and comment. If you have any questions, please contact me.

Sincerely,

Matthew Sterner, M.A.
Transportation Archaeologist
(360) 586-3082
matthew.sterner@dahp.wa.gov

DEPARTMENT OF
ARCHAEOLOGY &
HISTORIC PRESERVATION
Protect the Past, Shape the Future

Allyson Brooks Ph.D., Director
State Historic Preservation Officer

October 28, 2013

Mr. Bill Kerschke
Federal Emergency Management Administration
130 228th St SW
Bothell, WA 98021

In future correspondence please refer to:
Log: 011110-01-FEMA
Property: Dryad (Leudinghaus) Bridge Replacement
Re: APE Modification Concur, No Historic Properties

Dear Mr. Kerschke:

I have reviewed the materials forwarded to our office for the Dryad (Leudinghaus) Bridge Replacement project. Thank you for your description of the revised area of potential effect (APE) for the project. We concur with the definition of the revised APE. Based on the procedures outlined in your correspondence, I concur with a continued determination of no historic properties affected for the project

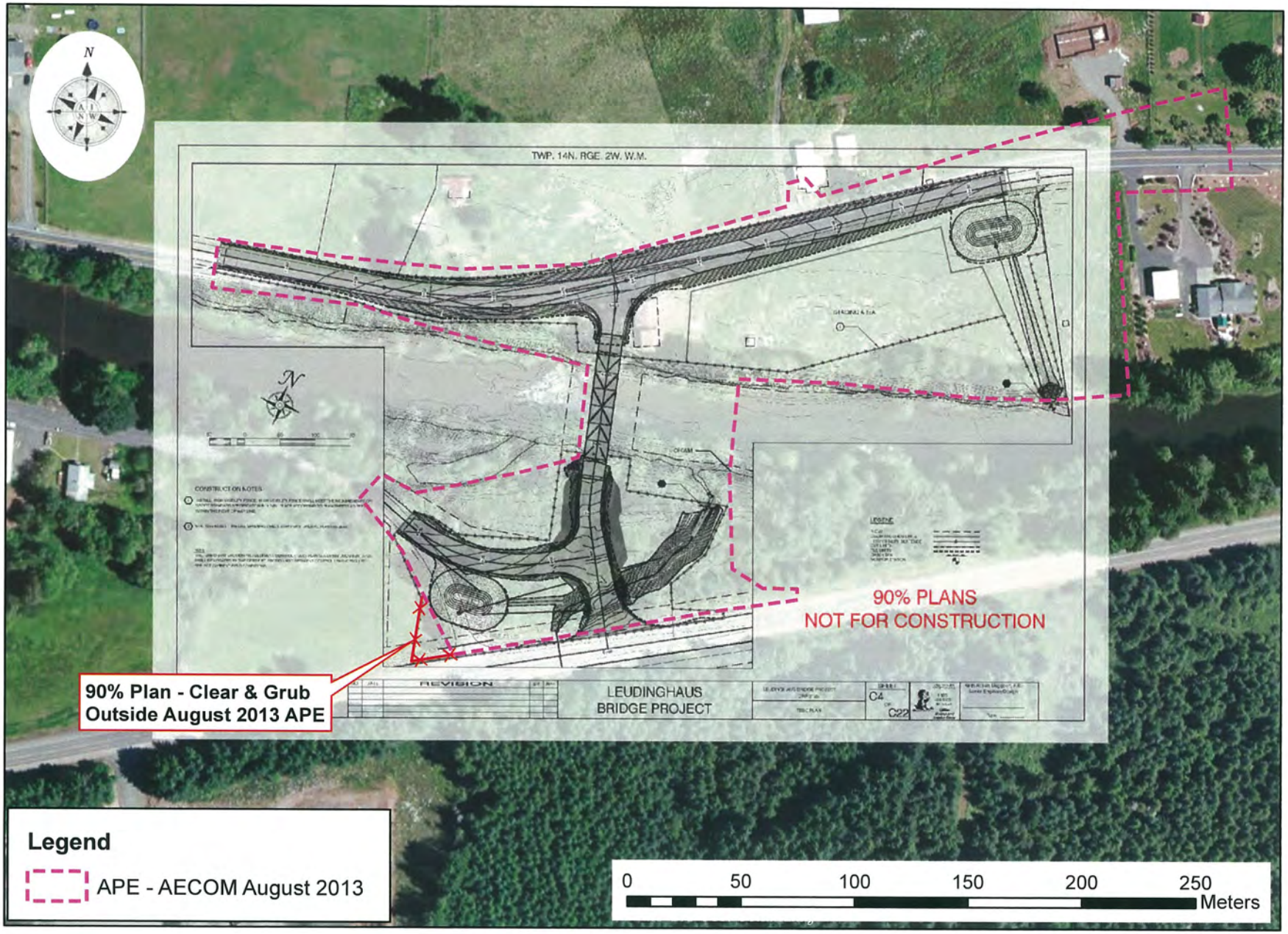
We would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4) and the survey report when it is available.

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer in conformance with Section 106 of the National Historic Preservation Act and its implementing regulations 36CFR800. Should additional information become available, our assessment may be revised.

Thank you for the opportunity to review and comment. If you have any questions, please feel free to contact me.

Sincerely,

Matthew Sterner, M.A.
Transportation Archaeologist
(360) 586-3082
matthew.sterner@dahp.wa.gov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TWP. 14N. RGE. 2W. W.M.
90% PLANS
NOT FOR CONSTRUCTION
90% Plan - Clear & Grub
Outside August 2013 APE
REVISION
LEUDINGHAUS
BRIDGE PROJECT
C4
C22
Legend
APE - AECOM August 2013
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U.S. Department of Homeland Security
Region X
130 228th Street SW
Bothell, WA 98021-9796

FEMA

Dear Interested Party

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) is proposing to support Lewis County by providing partial funding to repair/replace two bridges on the Chehalis River, near Dryad, Washington: (1) the Dryad Bridge, on Chandler Road; and (2) the Mays Bridge, on Leudinghaus Road. Severe storms in the region on December 3, 2007, caused extensive flooding, landslides, and mudslides. A presidential disaster was declared in the region on December 8, 2007, making funds available to public entities for damage repairs.

The purpose of these two proposed projects is to provide road access for two bridges that were completely destroyed during the December 2007 storms. Bridge crossings along the Chehalis River are necessary to provide access from State Route (SR) 6 to residents living on the north side of the river. Currently, no river crossing access is provided at the former Dryad Bridge site. At the Mays Bridge site, a temporary modular bridge (called a Bailey bridge), on loan from the Washington State Department of Transportation (WSDOT), currently provides a one-lane crossing at the site of the former bridge site. The Mays Bridge site is approximately 3 miles east of the Chandler Bridge site (see the attached figures).

The proposed project at the Dryad Bridge site (also called the Chandler Bridge) includes the construction of a precast post tensioned spliced girder bridge, at a revised alignment. The proposed bridge design is a 220-foot long and 28-foot wide single-span concrete structure, 19 feet longer than the former bridge. The new alignment is slightly upstream (west of) the former bridge alignment, and the new grade of the approach and bridge deck would be raised by approximately 14 feet to improve the connection to SR 6.

The proposed project at the Mays Bridge site includes the construction of a precast girder bridge, with a revised alignment. The proposed bridge design is a 180-foot long and 28-foot wide single-span concrete structure, 10 feet wider than the former bridge. The new alignment is slightly downstream (east of) the former bridge alignment, which will allow the temporary Bailey bridge to remain in use as the new bridge is constructed. The grade of the new approach and bridge deck would be raised by approximately 14 feet.

Both bridge construction projects have been designed in accordance with standard design practices established by the American Association of State Highway and Transportation Officials (AASHTO) as documented in the AASHTO Bridge Manual. Both new proposed bridges are single-span structures, designed to better pass debris associated with high-flow events in the river. The currently proposed designs were selected after an initial engineering review of potential design solutions. There may be deviations to the designs depending on comments and other alternatives identified through the scoping process or the environmental review process. At both sites, the new approaches would require acquisition of right-of-way easements with several landowners in the vicinity.

The Scoping Process

The purpose of this notice is to invite you to participate in the "scoping process" by reviewing the initial proposals as outlined in this notice and providing comments to support the development of the Environmental Assessment (EA) documents being prepared. The National Environmental Policy Act (NEPA) requires FEMA to evaluate the impacts of these proposed actions on the human and natural environments. FEMA intends to prepare a separate EA for each of these two projects. We are asking your assistance to identify the scope of issues and concerns to be addressed in the analysis, develop alternatives to the proposed actions, and identify potential impacts of implementing either of the two projects.

Please submit your written comments on these proposals (or, if you represent an agency, a written confirmation of receipt of this notice stating that your agency has no comments to contribute) to FEMA's consultant:

Jim Keany, EDAW AECOM
710 Second Avenue, Suite 1000
Seattle WA, 98104
Jim.Keany@aecom.com

Comments must be received by October 1, 2009.

If you have questions about this letter, the projects, or if you want to receive a copy of the Draft EA document for review and comment when it is released later during the public involvement process, please feel free to contact Jerry Creek, Environmental Specialist via email (jerry.creek@dhs.gov) or phone (425-482-3719) or me via email (mark.eberlein@dhs.gov) or phone (425-487-4735).

Sincerely,

Mark Eberlein
Regional Environmental Officer
FEMA Region 10

Enclosure: Project Vicinity Maps
Distribution List

Distribution List

FEDERAL AGENCIES

U.S. Environmental Protection Agency (EPA)
- Christine Reichgott, NEPA Review Unit Mgr
- Gretchen Hayslip, Office of Env Assessment, Aquatic Biologist
- Lillian Herger, Office of Env Assessment, Fisheries Biologist
- Wendy Marshall, Office of Water and Watersheds

Federal Emergency Management Agency (FEMA)
- Bill Gadberry, Public Assistance Program

U.S. Fish and Wildlife Service (USFWS)
- Rowan Baker, Region 1 NEPA Coordinator
- Brian Peck, Chehalis Fisheries Restoration Program
- John Grettenberger, Division Manager

National Marine Fisheries Service (NMFS)
- Kathe Hawe, NW NEPA Coordinator
- Steve Landino, WA State Habitat Office

U.S. Army Corps of Engineers (Corps)
- Lester Soule, Chief, Civil Projects Branch
- Patricia Robinson, Floodplain Mgmt Program

STATE AGENCIES

Washington State Historic Preservation Office (SHPO)
- Allyson Brooks, DAHP, SHPO
- Matthew Sterner, DAHP, Transportation Archaeologist
- Rob Whitlam, SHPO, Archaeologist

Washington Department of Ecology (Ecology)
- Chris Hempleman, WA Dept of Ecology, Shorelands & Env Assistance
- Dave Rountry, WA Dept of Ecology, Water Q Program
- Peg Plummer, WA Dept of Ecology, SEPA Register Coordinator
- Scott McKinney, WA Dept of Ecology, Flood Program

Washington Department of Fish and Wildlife (WDFW)
- Bob, Burkle
- Scott, Brummer
- Steve, Manlow
- Chad, Stussy, Watershed Stewardship Biologist

Washington State Emergency Mgmt Division
- Gary, Urbas, Public Assistance

Washington Department of Transportation
- Cheryl, McNamara, NEPA Specialist
- Ernest , Combs, NEPA Specialist
- Colin, Newell, Area Engineer

Washington Department of Emergency Management
- SEPA Center

Local Agencies

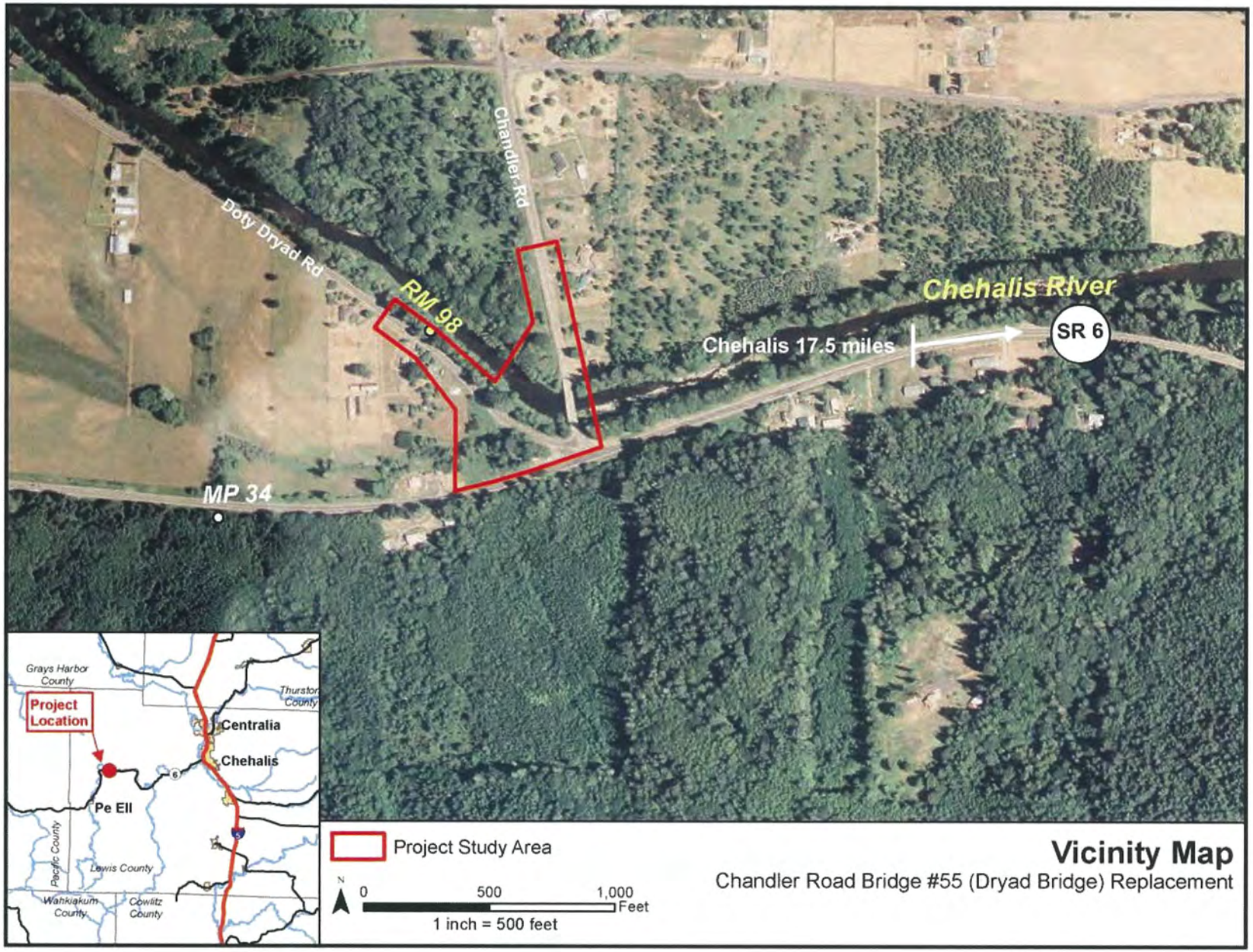
Bob Amrine, Lewis County Conservation District, District Manager
Keith Muggoch, Lewis County Public Works
Kernen Lien, Lewis County, Senior Planner

Tribal Contacts

Richard Bellon, Chehalis Confederated Tribes

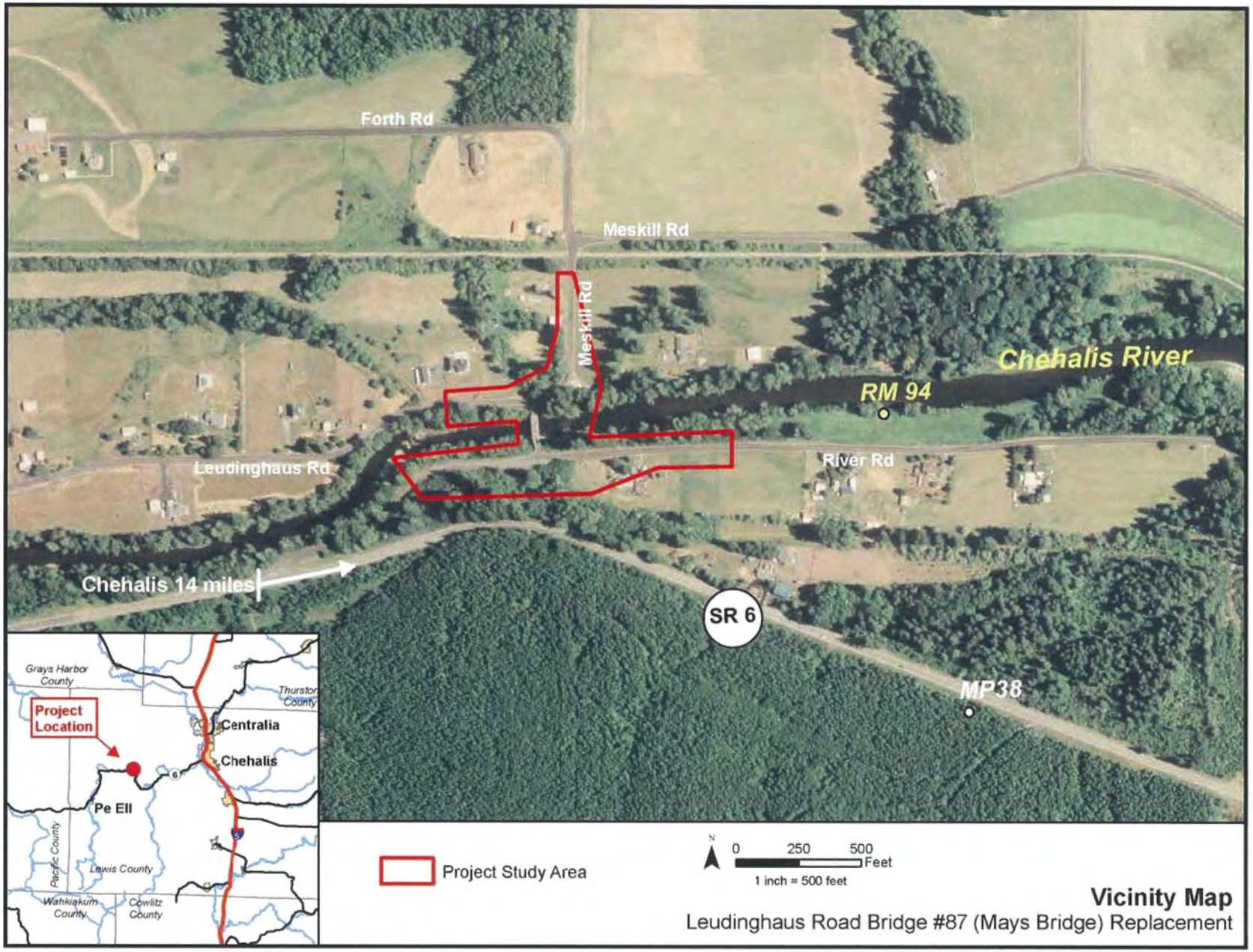
Other Stakeholders

Kathy Jacobson, Chehalis Basin Education Consortium
Chehalis Basin Fisheries Task Force
Lee Napier, Chehalis Basin Partnership
Janet Strong, Chehalis River Basin Land Trust
Chehalis River Council
Fay, Osbourn, Neighbor
John, Baker, Neighbor
Marvin & Diana, McCloud, Neighbor
Brenda, Boardman, Neighbor
Donald & Margret, Colley, Neighbor
William & Faith, McConnell, Neighbor
Irene, LeMaster, Neighbor
William & Nicole, Bush, Neighbor
Troy & Heather, Cox, Neighbor
Jacqueline, Morgan Trust, Neighbor
Elliot & Valerie, Bornstein, Neighbor



Vicinity Map

Chandler Road Bridge #55 (Dryad Bridge) Replacement



Vicinity Map

Leudinghaus Road Bridge #87 (Mays Bridge) Replacement

Elliot and Valerie Bornstein
553 River Road
Chehalis, WA 98532
(360)291-3620

September 26th, 2009

Jim Keany, EDAW AECOM
FEMA Consultant
710 Second Avenue, Suite 1000
Seattle, WA 98104

RE: MAY'S BRIDGE

Mr. Keany:

I am writing in regards to the proposed May's Bridge project. I have several questions and concerns about this matter.

My main concern is that two bridges are not necessary; one bridge would be sufficient. If the May's Bridge is to be replaced, why not move it west where it would have much less impact. I am having trouble understanding why the government would spend millions of dollars to put in a bridge that will destroy our property and home, when the Chandler Bridge is approximately four miles away. Putting in the May's Bridge will only save commuters six to eight minutes of driving time.

First, Why is it necessary to put the bridge further east (downstream), instead of further west (upstream)? As moving it east puts it closer to our home. Second, why is it necessary for the bridge to be ten feet wider? We are in the country; this is a country road, not a highway! This would create an opportunity for increased traffic and speed. Third, why is it necessary for the bridge to be raised fourteen feet? We have lived in this home for approximately twenty years; in that time, the flood waters have never even reached our road. Fourth, what other proposals have there been in regard to this project? And, if there are others, why have we not been informed of these as well? This is a huge decision to make. It seems like we would have been informed of a project of this magnitude prior to us setting our foundation, for the building of our new home. Fifth, how much will this project affect the current and future value of our home and property? This is our only asset; our retirement. This home and property is to be left to our children upon our passing.

This proposed project will have a direct impact on mine and my family's quality of life. We chose to live here and raise our family so we could enjoy the quiet and beauty of the tranquil country setting. With the amount of property you want to take, it will take away all of our river-front property and all of the area used by my children and grandchildren

to run, play with their dogs, and play sports. They also spend the summers swimming in the river and enjoying the outside country life. I worry about the safety of my husband and grandchildren. There are no sidewalks in the country, therefore when our grandchildren ride bikes, take walks, rollerblade, or any other activity that requires a lot of space, they have to play partly in the road (of course always with adult supervision). Looking at your project study area photo, the new road will come up to our front porch; completely taking away any area for my husband or grandchildren to walk and play safely. In addition, losing this amount of property will result in ruining all future projects that we have had planned for our grandchildren and ourselves.

Nine years ago my husband was in an accident- semi vs. train, resulting in a Traumatic Brain Injury (TBI), which includes cognitive deficits, balance issues, memory issues, etc. He is permanently disabled and requires twenty-four hour care. It directly affects his health and well-being when he is removed from his familiar surroundings. While we were temporarily misplaced due to the flood, we were in a rental. During this time, he was very confused, disoriented, agitated, and depressed, until we were able to move back onto our property. He has a terrible fear of trains due to the accident and TBI. He gets very scared when he hears a train; out here in our home, he is unable to hear a train, and therefore he does not panic.

Years prior to the December 2007 flood, we had our home remodeled to accommodate his needs. We had a circular driveway put in so that he was able to walk on a level surface with the use of his walker or with the use of his wheelchair, depending on what he needed at the time. If this project proceeds, that driveway will be inaccessible. My husband has many needs that require a lot of attention and careful planning. With the outcome of this project his quality of life will be damaged to the extreme.

We have already lost everything we have ever owned. All we had were the clothes on our backs!! I think that losing everything in your life once, is more than anyone should have to go through. We were displaced from our home for eighteen months. We have put so much time, money, and effort to be able to move back home. We have only been home for about two months. The thought of losing our home once again, has added an overwhelming amount of stress to our lives.

Nature was responsible for taking our home the first time. A natural disaster, which is unpreventable, and now it is the Government who is responsible for wanting to take our home the second time, something which is completely preventable. There are other options that would cause much less impact.

Sincerely,

Valerie Bornstein

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

October 1, 2009

Jim Keany, Senior Ecologist
EDAW AECOM
710 Second Avenue, Suite 100
Seattle, WA 98104

Dear Mr. Keany:

Thank you for the opportunity to comment on the national environmental policy act/scoping for the Dryad Bridge & Mays Bridge Repair/Replace project located on Chandler Road and Leudinghaus Road. The Department of Ecology (Ecology) reviewed the information provided and has the following comment(s):

SEPA REGIONAL PROJECT LEAD: Sarah Lukas (360) 407-7459

I recommend the Environmental Analysis include an analysis of the proposed placement of the replacement structures. The analysis should contend that the proposed placement of the structures will:

- Avoid and minimize detriment to riparian habitat;
- Ensure the proposed bridges will sustain future flood levels equal to a 100-year flood event; and,
- Establish consistency with the Lewis County Shoreline Master Program, the State and Federal Clean Water Acts, and other applicable laws.

Ecology's comments are based upon information provided by the lead agency. As such, they may not constitute an exhaustive list of the various authorizations that must be obtained or legal requirements that must be fulfilled in order to carry out the proposed action.

If you have any questions or would like to respond to these comments, please contact the appropriate reviewing staff listed above.

Department of Ecology
Southwest Regional Office

(SM: 09-5157)

cc: Sarah Lukas, SEA

From: McCloud9 LLC [mailto:the_mccloud9@yahoo.com]

Sent: Saturday, September 05, 2009 2:44 PM

To: Keany, Jim

Cc: mark.eberlein@dhs.gov

Subject: Property on Hwy 6 effected by new bridge

We have the property on hwy 6 (4212 state route 6) that is going to be effected by this bridge going in. Looking at your map and boundries you are wanting to bring it to on our property, it looks like you are taking 1/3 of our acerage. We are wanting to relocate elsewear and sell our property. It would be almost impossible to sell this property after it has been cut down that much. Especially since visibility coming off that angle will be very dangerous due to the blockage of our trees on the rest of our property line. This would most likely mean you plan on taking out all our trees on the property line as well, which leaves our place bare of protection from the road. We would like to ask that you purchase the whole piece of property so we can move somewhere else. Please let us know what your intentions are. Thanks.Marvin & Diana McCloud,Jr.

U.S. Department of Homeland Security
Region X
130 228th Street SW
Bothell, WA 98021-9796

FEMA

August 13, 2012

RE: FEMA Proposal to Fund Leudinghaus Road Bridge Replacement
FEMA-1734-DR-WA, PW 110
Lewis County, Washington
NEPA Scoping for Environmental Assessment

Dear Interested Party:

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) is proposing to support the Lewis County Public Works Department by providing partial funding to replace the Leudinghaus Road Bridge (also known as Mays Bridge) across the Chehalis River near the community of Meskill in Lewis County, Washington. The original bridge was washed away during a severe winter storm and flooding on December 3, 2007 (see below). The President declared the storm event a major disaster (FEMA 1734-DR-WA), making funds available for public infrastructure repairs.

The purpose of this notice is to invite you to participate in a National Environmental Policy Act (NEPA) scoping process by reviewing the initial proposal as outlined in this letter and providing comments to help FEMA prepare a draft Environmental Assessment (EA) under NEPA. The EA will evaluate the impacts of this proposed action on the natural and cultural environment. We are asking your assistance in identifying the scope of issues and concerns to be addressed in the analysis, developing viable alternatives to the proposed action, and identifying potential impacts of implementing the project.

During the storm, the Chehalis River overflowed its banks, carrying large woody debris downstream. This debris hit and destroyed the vehicular bridge that connected River Road, on the south side of the river, to Leudinghaus Road, on the north side of the river. This bridge provided access from State Route (SR) 6 via River Road across the Chehalis River to homes, businesses, and natural and recreational resources on the north side of the river.

The project proposal is to restore vehicular access between these areas by constructing a new bridge structure over the Chehalis River. The proposed bridge design is a single-span structure with an elevated bridge deck to better accommodate debris associated with high-flow events in the river (the new bridge deck would be raised by approximately 14 feet). The higher elevation of the proposed bridge structure would require alterations to the approach roads on both sides of the river to match the elevation of the new bridge, including grade changes, realignment, and new roadway.

In several public meetings and workshops, FEMA solicited input from residents and interested parties in Lewis County regarding different location alternatives for bridge replacement. As a result of these meetings, FEMA identified two potential action alternatives for evaluation in the NEPA EA, which involve construction of the proposed new bridge at different locations along the Chehalis River, but will

consider alternate or additional action alternatives identified during this scoping process, which involves a larger audience.

Action Alternative 1, which Lewis County has identified as their Preferred Alternative, involves construction of a new bridge at a new location approximately 2,500 feet upstream (west) of the former bridge site. Under Action Alternative 1, the new bridge would extend from the intersection of Hatchery Road and SR 6 on the south side of the river to Leudinghaus Road on the north side of the river. Action Alternative 2 involves construction of a new bridge at the original bridge site with a new SR 6 intersection.

The project area is located in western Lewis County, approximately 15 miles west of Chehalis via SR 6. The project area is located in Section 9 of Township 13N, Range 04W (see attached map). The project coordinates are 46.63398 N (latitude) / -123.190842 W (longitude).

Submittal of Comments

Please submit your written comments on this proposal (or, if you represent an agency, a written confirmation of receipt of this notice stating that your agency has no comments to contribute) to FEMA via a reply to the email forwarding this notice. Or you may submit written comments via regular mail to:

Science Kilner
Acting Regional Environmental Officer
FEMA Region 10
130 228th St. SW
Bothell, WA 98021-9796

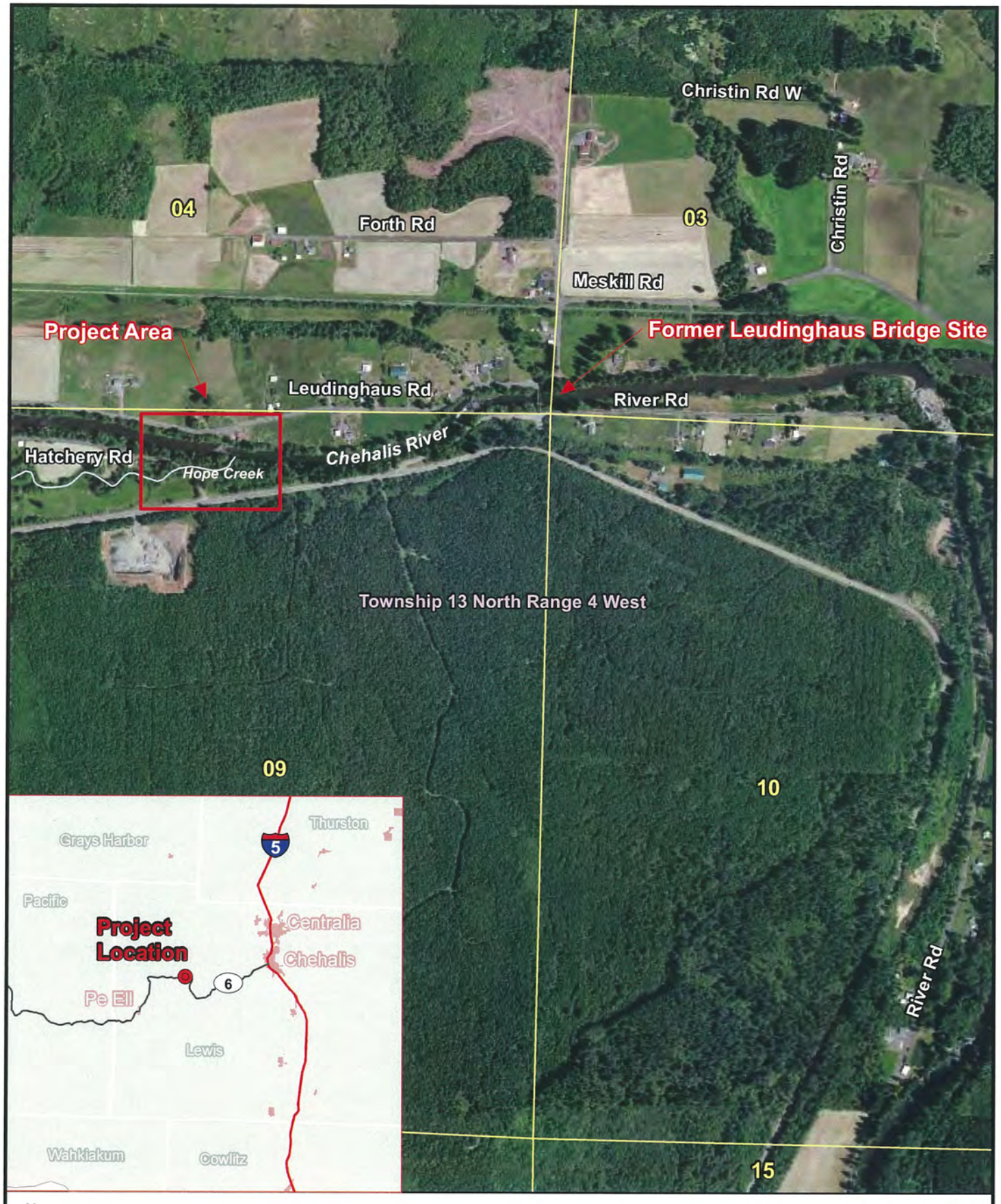
Comments must be received in writing prior to 5:00 p.m. on Friday, September 21, 2012.

If you have questions about this letter, the project, or if you want to receive a copy of the Draft EA document for review and comment when it is released later during the public involvement process, please feel free to contact me via email (science.kilner@fema.dhs.gov) or phone (425-487-4713).

Sincerely,

Science Kilner
Acting Regional Environmental Officer
FEMA Region 10

Enclosures:
Project Vicinity Map



Vicinity Map

Leudinghaus Bridge Replacement

Howard, Linda

From: HALEY RICHARDS [haley.richards@live.com]
Sent: Sunday, August 19, 2012 8:25 PM
To: Howard, Linda
Subject: Re: NEPA Scoping Notice for the Leudinghaus Bridge Replacement Project Environmental Assessment

Haley and Dave Richards
708 Meskill rd chehalis, wa. 98532
We choose the hatchery rd bridge project.
Thank you for wanting out input..
Haley Richards

Sent from my iPad

On Aug 14, 2012, at 12:04 PM, "Howard, Linda" <Linda.Howard@aecom.com> wrote:

> Dear Interested Parties:
>
> Attached is a letter from the Federal Emergency Management Agency (FEMA) announcing the public scoping process associated with a proposed disaster-related funding action for the Leudinghaus Road Bridge Replacement Project in Lewis County, Washington. Details of this project are included in the letter.
>
> As part of its compliance responsibilities under the National Environmental Policy Act (NEPA), FEMA is inviting you to participate in the scoping process for preparation of an environmental assessment (EA). Your assistance will help to identify the scope of issues and concerns to be addressed in the analysis, develop viable alternatives to the proposed action, and identify potential impacts of implementing the project. The attachment to this email provides additional information regarding the project.
>
> As noted in the letter, please send any scoping-related comments you may have to FEMA by 5:00 p.m. on Friday, September 21, 2012 by replying to this email or by submitting written comments via regular mail to:
>
> Science Kilner
> Acting Regional Environmental Officer
> FEMA Region 10
> 130 228th St. SW
> Bothell, WA 98021-9796
>
> <Leudinghaus-Bridge-Scoping-Notice.pdf>

Howard, Linda

From: Nikki Bush [bushfam99@hotmail.com]
Sent: Monday, August 20, 2012 9:49 PM
To: Howard, Linda
Subject: RE: NEPA Scoping Notice for the Leudinghaus Bridge Replacement Project Environmental Assessment

Science Kilner
Acting Regional Environmental Officer
FEMA Region 10
130 228th St. SW
Bothell, WA 98021-9796

As a Leudinghaus Rd community member and one of numerous families directly impacted by the devasting flood of 2007, we are very excited to hear of the advancement in the replacement of the Leudinghause bridge. We are very much in favor of Action Alternative 1 involving construction at new location of Hatchery Rd and SR 6. Our property would be of direct involvement with Alternative 2 which would include loss of property and extreme change of landscape. Having attended several meetings it is understood that the environmental change would be drastic due to the new bridge requirements. The elevation of a new bridge, grade changes with approach, realignment and roadways which includes change of our personal driveway and pasture would change both short and long term of our personal and professional lives. The property and land we own now is vital to the raising of beef.

Alternatives were never given to us as a property owner that would be affected at the beginning of this long process of replacement. We were pleased to have heard that an alternative location was a possibility and we are VERY STRONGLY in favor of the change in location from where it was initially. Hatchey Rd and SR 6 would affect the least amount of property owners and restore vehicular access over Chehalis River on the East end of Leudinghaus. Emergency response time would improve as well.

Thank you for the consideration and allowing comments of the proposal for the Leudinghaus Bridge Replacement Project.

Sincerely,

Bill and Nikki Bush
707 Meskill Rd
Chehalis, WA 98532

Linda.Howard@aecom.com
To: Linda.Howard@aecom.com
Subject: NEPA Scoping Notice for the Leudinghaus Bridge Replacement Project Environmental Assessment
Date: Tue, 14 Aug 2012 19:04:07 +0000

Dear Interested Parties:

Attached is a letter from the Federal Emergency Management Agency (FEMA) announcing the public scoping process associated with a proposed disaster-related funding action for the Leudinghaus Road Bridge Replacement Project in Lewis County, Washington. Details of this project are included in the letter.

As part of its compliance responsibilities under the National Environmental Policy Act (NEPA), FEMA is inviting you to participate in the scoping process for preparation of an environmental assessment (EA). Your assistance will help to identify the scope of issues and concerns to be addressed in the analysis, develop viable alternatives to the proposed action, and identify potential impacts of implementing the project. The attachment to this email provides additional information regarding the project.

As noted in the letter, please send any scoping-related comments you may have to FEMA by 5:00 p.m. on Friday, September 21, 2012 by replying to this email or by submitting written comments via regular mail to:

Science Kilner
Acting Regional Environmental Officer
FEMA Region 10
130 228th St. SW
Bothell, WA 98021-9796

Howard, Linda

From: Heather Cox [hcox425@yahoo.com]
Sent: Tuesday, August 21, 2012 4:22 PM
To: Howard, Linda
Subject: Re: NEPA Scoping Notice for the Leudinghaus Bridge Replacement Project Environmental Assessment

Science Kilner
Acting Regional Environmental Officer
FEMA Region 10

Ladies and Gentlemen:

As a resident of Meskill on Leudinghaus Rd, we would like to offer our preferred choice in the Meskill Bridge Replacement. We feel that Option 1 would be the best alternative. It would be the safest from the highway and cause the least disruption to residents.
We look forward to watching the progression of our bridge replacement at the Hatchery Rd site.
Thankyou,
Sincerely,

Troy & Heather Cox
120 Leudinghaus Rd
Chehalis, WA 98532

From: "Howard, Linda" <Linda.Howard@aecom.com>
To: "Howard, Linda" <Linda.Howard@aecom.com>
Sent: Tuesday, August 14, 2012 12:04 PM
Subject: NEPA Scoping Notice for the Leudinghaus Bridge Replacement Project Environmental Assessment

Dear Interested Parties:

Attached is a letter from the Federal Emergency Management Agency (FEMA) announcing the public scoping process associated with a proposed disaster-related funding action for the Leudinghaus Road Bridge Replacement Project in Lewis County, Washington. Details of this project are included in the letter.

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Science Kilner
Acting Regional Environmental Officer
FEMA Region 10
130 228th St. SW
Bothell, WA 98021-9796

As part of its compliance responsibilities under the National Environmental Policy Act (NEPA), FEMA is inviting you to participate in the scoping process for preparation of an environmental assessment (EA). Your assistance will help to identify the scope of issues and concerns to be addressed in the analysis, develop viable alternatives to the proposed action, and identify potential impacts of implementing the project. The attachment to this email provides additional information regarding the project.

As noted in the letter, please send any scoping-related comments you may have to FEMA by 5:00 p.m. on Friday, September 21, 2012 by replying to this email or by submitting written comments via regular mail to:

Science Kilner
Acting Regional Environmental Officer
FEMA Region 10
130 228th St. SW
Bothell, WA 98021-9796

<Leudinghaus-Bridge-Scoping-Notice.pdf>

August 28, 2011

Dear Science Kilner,

We are in favor of a bridge at <u>either</u> <u>site</u>.

Our main concern is without a bridge we are too far from a fire dept; for insurance reasons.

thank-you

Guy and Gillen Bauman
267 River Rd
Chehalis, WA
98532

Howard, Linda

From: Sue Rosbach [suerosbach@yahoo.com]
Sent: Monday, September 03, 2012 9:37 PM
To: Howard, Linda
Subject: Re: NEPA Scoping Notice for the Leudinghaus Bridge Replacement Project Environmental Assessment

Thank you for giving us the opportunity to have some input for the placement of the Leudinghaus Bridge. My family has lived on this property since 1902, so needless to say it is very near and dear to our hearts. We are strongly in favor of placing the replacement bridge with Action ALternative 1 for many reasons; first, the safety of turning onto the road from Highway 6. The Hatchery Road turnoff is much safer, has better visibility and you have much more time to either slow down or get up to speed on the highway. Second, there is no hairpin turn on Hatchery Road, which is incredibly dangerous on River Road; third, fewer homeowners would be adversely affected with the Hatchery Road option. In fact, I understand the homeowners on the Leudinghaus side that would be the only home affected are completely in favor of this choice. The other option would adversely affect several homeowners, and none of them are willing to devalue their property, in fact lose property with the new design.

I urge you to get the replacement bridge in place soon. The extra time (15 minutes each way) that it now takes is a burden. The lack of safety with being so isolated is very unsettling with the police and fire departments as well as the ambulance taking so long to get to our house. This is NOT a feeling we should have to endure. There has always been a bridge in this small community of Meskill, but is/was used by more than just the people that live here. We NEED this bridge soon.

Thank You,
Joe and Sue Rosbach
128 Christin Rd.
Chehalis,WA. 98532

Phone: 360 520-1340 cell. 360 291-3624 home.

Sent from my iPad

On Aug 14, 2012, at 12:04 PM, "Howard, Linda" <Linda.Howard@aecom.com> wrote:

> Dear Interested Parties:
>
> Attached is a letter from the Federal Emergency Management Agency (FEMA) announcing the public scoping process associated with a proposed disaster-related funding action for the Leudinghaus Road Bridge Replacement Project in Lewis County, Washington. Details of this project are included in the letter.

To: Science Kilner

I've received the letter concerning the Leudinghaus bridge. I am a resident of Meskill Washington. Since the bridge was destroyed and the Bailey bridge was removed it has put a large damper on traveling for me. The longer drive is putting extra wear and tear on my vehicles, including tires, brakes, appearance, and more fuel to drive the longer route. The Hatchery Road proposal , I believe would be the best location for the new bridge. I hope this information gives us as a community the opportunity to get a new bridge developed.

Thank you for the opportunity to share my opinions about the project.

Sincerely,

Mr. Charles Christin

630 Meskill Road

Chehalis, WA 98532

From:	King, Susan
To:	Howard, Linda
Subject:	Fw: FEMA Proposal to Fund Leudinghaus Road Bridge Replacement
Date:	Thursday, September 20, 2012 1:36:20 PM

From: Kilner, Science
Sent: Thursday, September 20, 2012 04:34 PM
To: King, Susan
Subject: FW: FEMA Proposal to Fund Leudinghaus Road Bridge Replacement

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From: Linda Stanley [mailto:lis59@msn.com]
Sent: Thursday, September 20, 2012 1:30 PM
To: Kilner, Science
Subject: FEMA Proposal to Fund Leudinghaus Road Bridge Replacement

Dear Science Kilner,

I am writing you this email in response to a letter I received in the mail about the bridge replacement for the Leudinghaus Bridge. I'm really not sure what you what us to say, we said everything in the last meeting we had with FEMA and the County. So...all I would like to say is that we really need a bridge and as quick as possible!!! We have the 911 issue, where it takes them about 10 minutes longer to get to us, which in an emergency is a lot of time!!! And the county has left us out on an island in the event there was another flood, we are blocked from getting out of our property, due to the little stream's that would flood over the roadway way before it would our property, so we would be trapped!!! Plus, I do have a in-home business, which requires customers to be able to get to my home, which limit's my income, because I can only pull from one area, due to the fact it is 8-10 miles out of the direction where I live, which if there was a bridge right by where I live (like their use to be) I could draw people from both directions? In this economy, it is a hardship on my husband and I to have him drive an extra 50 miles a week just to get to work and back also.
If you have any questions please feel free to contact me at lis59@msn.com or (360) 623-0277. Thank You Linda Stanley and Joe Givens 101 Forth Road, Chehalis, Wa 98532

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

September 21, 2012

Ms. Science Kilner
Acting Regional Environmental Officer
FEMA Region 10
130 228th Street Southwest
Bothell, WA 98021-9796

Dear Ms. Kilner:

Thank you for the opportunity to comment on the NEPA scoping for the Leudinghaus Road Bridge Replacement project (FEMA-1734-DR-WA, PW 110) located in Lewis County. The Department of Ecology (Ecology) reviewed the information provided and has the following comment(s):

SHORELANDS & ENVIRONMENTAL ASSISTANCE:
Alex Callender (360) 407-6167

The project must be consistent with the shoreline Management Act and the local Shoreline Master Program. Any in water work may require state and federal Water quality certification and mitigation. I f wetland impacts are expected, now would be the time to consider your mitigation options. There is a new umbrella bank that should be available for credits shortly.

WASTE 2 RESOURCES: Mike Drumright (360) 407-6397

If greater than 250 cubic yards of inert, demolition, and/or wood waste is used as fill material, a solid waste handling permit is required from the local jurisdictional Health Department (WAC 173-350-990).

All grading and filling of land must utilize only clean fill, i.e., dirt or gravel. All other materials, including waste concrete and asphalt, are considered to be solid waste and permit approval must be obtained through the local jurisdictional health department prior to filling (WAC 173-350-990).

Recycle Construction, Demolition and Land Clearing (CDL):
Property owners, developers, and contractors are encouraged to recycle all possible leftover CDL materials and reduce waste generated. Recycling construction debris is often less expensive than landfill disposal. Please visit Ecology's 1 800 Recycle Hotline database at: http://1800recycle.wa.gov or call the 1-800-RECYCLE hotline to find facilities that will accept your CDL materials for reuse or recycling.

SEPA REVIEWER: Sonia Mendoza
WATER QUALITY CONTACT: Sheila Pendleton-Orme (360) 690-4787

Any discharge of sediment-laden runoff or other pollutants to waters of the state is in violation of Chapter 90.48 RCW, Water Pollution Control, and WAC 173-201A, Water

Quality Standards for Surface Waters of the State of Washington, and is subject to enforcement action.

Erosion control measures must be in place prior to any clearing, grading, or construction. These control measures must be effective to prevent stormwater runoff from carrying soil and other pollutants into surface water or stormdrains that lead to waters of the state. Sand, silt, clay particles, and soil will damage aquatic habitat and are considered to be pollutants.

Proper disposal of construction debris must be on land in such a manner that debris cannot enter water of the state (e.g., Chehalis River) and stormdrains draining to waters of the state or cause water quality degradation of state waters.

During construction, all releases of oils, hydraulic fluids, fuels, other petroleum products, paints, solvents, and other deleterious materials must be contained and removed in a manner that will prevent their discharge to waters and soils of the state. The cleanup of spills should take precedence over other work on the site.

A permanent vegetative cover should be established on denuded areas at final grade if they are not otherwise permanently stabilized.

Provision should be made to minimize the tracking of sediment by construction vehicles onto paved public roads. If sediment is deposited, it should be cleaned every day by shoveling or sweeping. Water cleaning should only be done after the area has been shoveled out or swept.

Wash water from paint and wall finishing equipment should be disposed of in a way which will not adversely impact waters of the state. Untreated disposal of this wastewater is a violation of State Water Quality laws and statutes and, as such, would be subject to enforcement action.

Ecology's comments are based upon information provided by the lead agency. As such, they may not constitute an exhaustive list of the various authorizations that must be obtained or legal requirements that must be fulfilled in order to carry out the proposed action.

If you have any questions or would like to respond to these comments, please contact the appropriate reviewing staff listed above.

Department of Ecology
Southwest Regional Office

(SM:12-3968)

cc: Alex Callender, SEA
Mike Drumright, W2R
Sheila Pendleton-Orme, VFO/WQ